# GOVERNMENT OF INDIA
# PETROLEUM AND NATURAL GAS
# LOK SABHA

STARRED QUESTION NO:291
ANSWERED ON:28.07.2014
PRODUCTION OF OIL FROM OFFSHORE RESOURCES
Adhikari Shri Suvendu

**Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:**

(a) the onshore and offshore production of crude oil and natural gas in the country by oil companies during each of the last three years and the current year, company/ location-wise;

(b) the names of the companies, Indian or Foreign, which are involved in exploration and extraction of the oil from offshore resources;

(c) whether the Government has utilised the state-of-the-art technology to tap resources in offshore deep water;

(d) if so, the details thereof; and

(e) the long-term plan chalked out by the Government to augment the production of oil and gas and also boost refining capacity of the refineries?

## Answer

Minister of State in the Ministry of PETROLEUM & NATURAL GAS (I/C) (SHRI DHARMENDRA PRADHAN)

(a) to (e) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF THE LOK SABHA STARRED QUESTION NO. 291 BY SHRI SUVENDU ADHIKARI, MP TO BE ANSWERED ON 28.07.2014 REGARDING PRODUCTION OF OIL FROM OFFSHORE RESOURCES.

(a) Oil and Natural Gas Corporation Ltd. (ONGC) is extracting crude oil and natural gas from offshore fields in Mumbai Offshore (Off the coast of Maharashtra) & Eastern offshore (Off the coast of Andhra Pradesh) and from onshore fields in Gujarat, Assam, Tamil Nadu, Andhra Pradesh and free gas from Tripura & Rajasthan. OIL has onshore assets in Assam, Arunachal Pradesh and Rajasthan.

ONGCs onshore and offshore crude oil (including condensate) and natural gas production during last three years i.e. from 2011-12 to 2013-14 and the current year 2014-15 (April-June) is given below:-

| | Crude Oil Production (MMT) | | | | Natural Gas Production (MMSCM) | | | |
|---|---|---|---|---|---|---|---|---|
| | 2011-12 | 2012-13 | 2013-14 | 2014-15(till June, 2014) | 2011-12 | 2012-13 | 2013-14 | 2014-15 (till June, 2014) |
| Total Offshore | 16.328 | 15.617 | 15.541 | 3.928 | 17565 | 18102 | 17968 | 4303 |
| Total Onshore | 7.385 | 6.945 | 6.705 | 1.577 | 5751 | 5447 | 5316 | 1350 |
| Total ONGC | 23.712 | 22.562 | 22.246 | 5.505 | 23316 | 23549 | 23284 | 5653 |

OILs onshore production of crude oil and natural gas during the last three year and current year (upto Q1) is shown below:

| | 2011-12 | 2012-13 | 2013-14 | 2014-15 (till June, 2014) |
|---|---|---|---|---|
| Crude Oil Production (MMT) | 3.847 | 3.661 | 3.446 | 0.835 |
| Natural Gas Production (BCM) | 2.633 | 2.639 | 2.626 | 0.677 |

OIL is not producing any crude oil and natural gas from offshore areas.

Under the Production Sharing Contract (PSC) Regime, the crude oil and natural gas production during the last three years ( 2011-12 to 2013-14) and the current year ( 2014-15 , till June, 2014) in offshore and onland areas were as under:

Crude oil Production ( Million Metric Tonnes)

| Year | 2011-12 | 2012-13 | 2013-14 | 2014-15 (Till June, 2014) |
|---|---|---|---|---|
| Offshore | 3.73 | 2.80 | 2.66 | 0.68 |
| Onland | 6.80 | 8.84 | 9.42 | 2.37 |
| Total | 10.53 | 11.64 | 12.08 | 3.05 |

Natural Gas Production ( Billion Cubic Meters)

| Year | 2011-12 | 2012-13 | 2013-14 | 2014-15 (Till June,2014) |
|---|---|---|---|---|
| Offshore | 20.91 | 13.70 | 8.43 | 1.99 |
| Onland | 0.70 | 0.79 | 1.07 | 0.28 |
| Total | 21.61 | 14.49 | 9.50 | 2.27 |

(b) The details are given in Annexure-I.

(c) & (d) ONGC has utilised various state- of-the art Geology & Geophysics (G&G) technologies in the field of seismic data acquisition, processing and interpretation which ultimately help in establishing the hydrocarbon resources in offshore areas, including in deep-water areas.

ONGC has collaborated with multi-national companies like Petrobras, Statoil Hydro, INPEX, BG (companies having expertise and state- of-the art technologies in deep and ultra-deepwater areas) for technological and skill support for exploration in deep water block through JV participation.ONGC has also hired consultancy services of reputed G&G experts and technology service providers for establishing its offshore resources.

The state-of-the art technologies utilised by ONGC in Geophysical data acquisition are: Synthetic Aperture Radar (SAR) technology, Over and Under technology, 2D-Long Offset technology, Q-Marine technology, Sea Bed Node (SBN)-technology, Seabed Logging technology, Controlled Source electro-magnetic Sounding (CSEM), a marine electromagnetic technology, and for data Processing are 32 Node PC Cluster Software on On-board,GXT, GEOTOMO, and BEAM etc.

OIL has recently completed Acquisition, Processing and Interpretation (API) of around 1621 sq km of 3D seismic data in deep waters of Cauvery Basin (Block: CY-OSN-2009/2) using state- of-the art -technology. This has resulted in identification of two drillable prospects. Presently pre drilling activities are in progress.

Additionally, OIL as joint operator along with ONGC, has acquired around 2264 sq km of 3D seismic data in ultra deep waters of west Andaman Offshore using state-of-the-art technology.

The Contractors under the PSC Regime have deployed various modern technologies in the areas of exploration and production activities in deepwater areas including the following:

# Q-Marine Survey for seismic acquisition.

# Drilling of Horizontal and Multi-lateral wells.

# Multi-Phase Flow meters at subsea wells for online flow measurements.

# Down hole Pressure and Temperature Gauges for online monitoring of reservoir pressure and Temperature.

# FPSO for Crude oil Processing, Storage & offloading

(e) In order to accelerate the pace of exploration and production of oil and gas in the country, the Government has taken various steps as under:

# Offering of exploration blocks through NELP bidding rounds.

# Encouraging exploration and exploitation of alternative energy sources, such as Coal Bed Methane (CBM), Shale Gas/Shale Oil and Gas Hydrates etc.

# Policy for exploration and exploitation of Shale Gas/Shale Oil resources by NOCs under the Nomination Regime.

# Policy for exploration in the Mining Lease (ML) areas held by the Contractors after the expiry of exploration period.

# Policy on Non exclusive Multi-client Speculative Survey for assessment of unexplored sedimentary basin has been approved.

The refinery sector has been delicensed since June, 1998 and a refinery can be set up anywhere in India by a private or public sector company depending on its techno-commercial viability. The present name plate refining capacity of the country is 215.066 Million Metric Tonnes Per Annum (MMTPA). The total production of petroleum products during 2013-14 (Provisional) was 220.3 MMT. As against this the total consumption during 2013-14 (Provisional) was 158.2 MMT.